

DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Ms Meagan S. Walling on 6/02/2010.

3. The application has been amended as follows:

- Claim 17 has been amended as following:

17. (currently amended) A networking device comprising:
a memory for storing a first forwarding table and a second forwarding table;
a filter programmed to initiate a lookup operation in the first forwarding table to identify an egress interface for the received packet, without initiating a lookup operation in the second forwarding table, if a first field value of a header contained in a received packet meets a first set of conditions, and to initiate a lookup operation in the second forwarding table to identify an egress interface for the received packet, without initiating a lookup operation in the first forwarding table, if the first field value does not meet one or more conditions of the first set of conditions;
a plurality of ingress interfaces for receiving packets;
a plurality of egress interfaces for transmitting packets; and
a switch fabric for transmitting the received packets from the plurality of ingress interfaces to the plurality of egress interfaces based on the lookup operations,
~~where each of the lookup operations results in an identification of an egress interface from which the received packet is to be transmitted.~~

- Claim 21 has been amended as following:

21. (currently amended) In a router containing a plurality of forwarding tables, a method of packet forwarding, comprising:

programming a filter to perform a first lookup operation in a first forwarding table of the plurality of forwarding tables if a first field value of a received packet meets one or more conditions of a first set of conditions;

programming the filter to perform a second lookup operation in a second forwarding table of the plurality of forwarding tables if the first field value does not meet the one or more conditions of a first set of conditions;

receiving a particular packet at an ingress interface;

classifying the received packet based on the ~~at least a~~ first field value contained in a ~~[[the]]~~ header of the particular packet;

associating the first forwarding table or the second ~~one of the plurality of forwarding table tables~~ to the particular packet according to its classification;

performing a lookup operation in the associated forwarding table ~~according to at least a second field value contained in the header of the packet;~~

determining an egress interface based on the lookup operation; and

transmitting the particular ~~received~~ packet from the determined egress interface.

- Claim 26 has been amended as following:

26. (currently amended) In a networking device, a method of forwarding packets, comprising:

programming a filter to perform a first lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions;

programming the filter to perform a second lookup operation in a second forwarding table if the first field value does not meet the one or more conditions of a first set of conditions;

classifying a received particular packet based on the first field value of information contained in the particular packet;

selecting the first forwarding table or the second ~~one of a plurality of~~ forwarding table tables based on the classification of the particular received packet;

performing a lookup operation using the selected forwarding table;

determining an egress interface for the particular packet based on the performed lookup operation; and

forwarding the particular packet to the egress interface.

Allowable Subject Matter

4. Claims 10 – 12, 17 – 19, 21 – 29 renumbered 1 – 15 are allowed.

5. The following is an examiner's statement of reasons for allowance:

The prior art made of record, in single or in combination, fails to disclose explicitly the limitations of:

“programming a filter to perform a first lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to initiate a second lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions; receiving a particular packet; determining, by the filter, whether the first field value of the particular packet meets the one or more conditions of the first set of conditions; performing the first lookup operation in the first forwarding table, without performing the second lookup operation in the second forwarding table, to identify a first egress port, of the networking device, when the first field value of the particular packet meets the one or more conditions; performing the second lookup operation in the second forwarding table, without performing the first lookup operation in the first forwarding table, to identify a second egress port, of the networking device, when the first field value of the particular packet does not meet the one or more conditions; and

forwarding the particular packet to the identified first egress port or the identified second egress port.” as disclosed in claim 10.

“a filter programmed to initiate a lookup operation in the first forwarding table to identify an egress interface for the received packet, without initiating a lookup operation in the second forwarding table, if a first field value of a header contained in a received packet meets a first set of conditions, and to initiate a lookup operation in the second forwarding table to identify an egress interface for the received packet, without initiating a lookup operation in the first forwarding table, if the first field value does not meet one or more conditions of the first set of conditions; a plurality of ingress interfaces for receiving packets; a plurality of egress interfaces for transmitting packets; and a switch fabric for transmitting the received packets from the plurality of ingress interfaces to the plurality of egress interfaces based on the lookup operations” as disclosed in claim 17.

“programming a filter to perform a first lookup operation in a first forwarding table of the plurality of forwarding tables if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to perform a second lookup operation in a second forwarding table of the plurality of forwarding tables if the first field value does not meet the one or more conditions of a first set of conditions; receiving a particular packet at an ingress interface; classifying the received packet based on the at least a first field value contained in a header of the particular packet; associating the first forwarding table or the second one of the plurality of forwarding table to the particular packet according to its classification; performing a lookup operation in the associated forwarding table; determining an egress interface based on the lookup operation; and transmitting the particular packet from the determined egress interface” as disclosed in claim 21.

“programming a filter to perform a first lookup operation in a first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to perform a second lookup operation in a second forwarding table if the first field value does not meet the one or more conditions of a first

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set of conditions; classifying a received particular packet based on the first field value of information contained in the particular packet; selecting the first forwarding table or the second forwarding table based on the classification of the particular received packet; performing a lookup operation using the selected forwarding table; determining an egress interface for the particular packet based on the performed lookup operation; and forwarding the particular packet to the egress interface.” as disclosed in claim 26.

“programming a filter to initiate a first lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions; programming the filter to initiate a second lookup operation in the second forwarding table if a first field value does not meet one or more conditions of the first set of conditions; receiving a particular packet; determining, whether the first field value of the particular packet meets the one or more conditions of the first set of conditions; performing the first lookup operation in the first forwarding table, without performing the second lookup operation in the second forwarding table, to identify a first egress port of the first plurality of egress interface ports, of the networking device, when the first field value of the particular packet meets the one or more conditions; performing the second lookup operation in the second forwarding table, without performing the first lookup operation in the first forwarding table, to identify a second egress port of the second plurality of egress interface ports, of the networking device, when the first field value of the particular packet does not meet the one or more conditions; and forwarding the particular packet to the identified first egress port or the identified second egress port.” as disclosed in claim 27.

6. Additionally, all of the further limitations in claims 11, 12, 18, 19, 22, 23, 24, 25, 28, 29 are allowable, since the claims are dependent upon independent claims, respectively.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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